

## SEQUENCE LISTING

&lt;110&gt; Bristol-Myers Squibb Company

<120> POLYNUCLEOTIDE ENCODING A NOVEL HUMAN G-PROTEIN COUPLED RECEPTOR,  
HGPRBMY27

&lt;130&gt; D0134.NP

&lt;150&gt; US 60/273,808

&lt;151&gt; 2001-03-07

&lt;150&gt; US 60/278,983

&lt;151&gt; 2001-03-27

&lt;160&gt; 75

&lt;170&gt; PatentIn version 3.0

&lt;210&gt; 1

&lt;211&gt; 2580

&lt;212&gt; DNA

&lt;213&gt; homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (457)..(1482)

&lt;400&gt; 1

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gctgctctgc acccgacac ttgctctgtc cccgcc atg tac aac ggg tgc tgc      474
                               Met Tyr Asn Gly Ser Cys
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Cys Arg Ile Glu Gly Asp Thr Ile Ser Gln Val Met Pro Pro Leu Leu
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Ile Val Ala Phe Val Leu Gly Ala Leu Gly Asn Gly Val Ala Leu Cys
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Gly Phe Cys Phe His Met Lys Thr Trp Lys Pro Ser Thr Val Tyr Leu

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Arg Thr Asp Tyr Tyr Leu Arg Arg Arg His Trp Ala Phe Gly Asp Ile			
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ccc tgc cga gtg ggg ctc ttc acg ttg gcc atg aac agg gcc ggg agc			762
Pro Cys Arg Val Gly Leu Phe Thr Leu Ala Met Asn Arg Ala Gly Ser			
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Ile Val Phe Leu Thr Val Val Ala Ala Asp Arg Tyr Phe Lys Val Val			
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His Pro His His Ala Val Asn Thr Ile Ser Thr Arg Val Ala Ala Gly			
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Ile Val Cys Thr Leu Trp Ala Leu Val Ile Leu Gly Thr Val Tyr Leu			
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Leu Glu Phe Phe Met Pro Leu Gly Ile Ile Leu Phe Cys Ser Phe Lys			
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att gtt tgg agc ctg agg cgg agg cag cag ctg gcc aga cag gct cgg			1098
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Met Lys Lys Ala Thr Arg Phe Ile Met Val Val Ala Ile Val Phe Ile			
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Thr Cys Tyr Leu Pro Ser Val Ser Ala Arg Leu Tyr Phe Leu Trp Thr			
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Val Pro Ser Ser Ala Cys Asp Pro Ser Val His Gly Ala Leu His Ile			
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Cys Ser Leu Lys Pro Lys Gln Pro Gly His Ser Lys Thr Gln Arg Pro	
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Glu Glu Met Pro Ile Ser Asn Leu Gly Arg Arg Ser Cys Ile Ser Val	
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Ala Lys Val Ser Lys Ala Ser Leu Met Gly Asn Gly Ile Pro Thr Cys	
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&lt;210&gt; 2

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 <213> homo sapiens

<400> 2

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Val Met Pro Pro Leu Leu Ile Val Ala Phe Val Leu Gly Ala Leu Gly  
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Asn Gly Val Ala Leu Cys Gly Phe Cys Phe His Met Lys Thr Trp Lys  
 35 40 45

Pro Ser Thr Val Tyr Leu Phe Asn Leu Ala Val Ala Asp Phe Leu Leu  
 50 55 60

Met Ile Cys Leu Pro Phe Arg Thr Asp Tyr Tyr Leu Arg Arg Arg His  
 65 70 75 80

Trp Ala Phe Gly Asp Ile Pro Cys Arg Val Gly Leu Phe Thr Leu Ala  
 85 90 95

Met Asn Arg Ala Gly Ser Ile Val Phe Leu Thr Val Val Ala Ala Asp  
 100 105 110

Arg Tyr Phe Lys Val Val His Pro His His Ala Val Asn Thr Ile Ser  
 115 120 125

Thr Arg Val Ala Ala Gly Ile Val Cys Thr Leu Trp Ala Leu Val Ile  
 130 135 140

Leu Gly Thr Val Tyr Leu Leu Leu Glu Asn His Leu Cys Val Gln Glu  
 145 150 155 160

Thr Ala Val Ser Cys Glu Ser Phe Ile Met Glu Ser Ala Asn Gly Trp  
 165 170 175

His Asp Ile Met Phe Gln Leu Glu Phe Phe Met Pro Leu Gly Ile Ile  
 180 185 190

Leu Phe Cys Ser Phe Lys Ile Val Trp Ser Leu Arg Arg Arg Gln Gln  
 195 200 205

Leu Ala Arg Gln Ala Arg Met Lys Lys Ala Thr Arg Phe Ile Met Val  
 210 215 220

Val Ala Ile Val Phe Ile Thr Cys Tyr Leu Pro Ser Val Ser Ala Arg  
 225 230 235 240

Leu Tyr Phe Leu Trp Thr Val Pro Ser Ser Ala Cys Asp Pro Ser Val  
 245 250 255

His Gly Ala Leu His Ile Thr Leu Ser Phe Thr Tyr Met Asn Ser Met  
 260 265 270

Leu Asp Pro Leu Val Tyr Tyr Phe Ser Ser Pro Ser Phe Pro Lys Phe  
 275 280 285

Tyr Asn Lys Leu Lys Ile Cys Ser Leu Lys Pro Lys Gln Pro Gly His  
 290 295 300

Ser Lys Thr Gln Arg Pro Glu Glu Met Pro Ile Ser Asn Leu Gly Arg  
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Arg Ser Cys Ile Ser Val Ala Lys Val Ser Lys Ala Ser Leu Met Gly  
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Asn Gly Ile Pro Thr Cys  
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<210> 3  
 <211> 362  
 <212> PRT  
 <213> GALLUS GALLUS

<400> 3

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Leu Leu Ala Gly Gly Trp Ala Ala Gly Asn Ala Thr Thr Lys Cys Ser  
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Leu Thr Lys Thr Gly Phe Gln Phe Tyr Tyr Leu Pro Thr Val Tyr Ile  
 35 40 45

Leu Val Phe Ile Thr Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met  
 50 55 60

Phe Val Phe His Met Arg Pro Trp Ser Gly Ile Ser Val Tyr Met Phe

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Asn	Leu	Ala	Leu	Ala	Asp	Phe	Leu	Tyr	Val	Leu	Thr	Leu	Pro	Ala	Leu
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Ile	Phe	Tyr	Tyr	Phe	Asn	Lys	Thr	Asp	Trp	Ile	Phe	Gly	Asp	Val	Met
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Cys	Lys	Leu	Gln	Arg	Phe	Ile	Phe	His	Val	Asn	Leu	Tyr	Gly	Ser	Ile
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Leu	Phe	Leu	Thr	Cys	Ile	Ser	Val	His	Arg	Tyr	Thr	Gly	Val	Val	His
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Pro	Leu	Lys	Ser	Leu	Gly	Arg	Leu	Lys	Lys	Lys	Asn	Ala	Val	Tyr	Val
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Ser	Ser	Leu	Val	Trp	Ala	Leu	Val	Val	Ala	Val	Ile	Ala	Pro	Ile	Leu
			165						170					175	
Phe	Tyr	Ser	Gly	Thr	Gly	Val	Arg	Arg	Asn	Lys	Thr	Ile	Thr	Cys	Tyr
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Asp	Thr	Thr	Ala	Asp	Glu	Tyr	Leu	Arg	Ser	Tyr	Phe	Val	Tyr	Ser	Met
		195					200					205			
Cys	Thr	Thr	Val	Phe	Met	Phe	Cys	Ile	Pro	Phe	Ile	Val	Ile	Leu	Gly
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Cys	Tyr	Gly	Leu	Ile	Val	Lys	Ala	Leu	Ile	Tyr	Lys	Asp	Leu	Asp	Asn
225					230					235					240
Ser	Pro	Leu	Arg	Arg	Lys	Ser	Ile	Tyr	Leu	Val	Ile	Ile	Val	Leu	Thr
				245					250					255	
Val	Phe	Ala	Val	Ser	Tyr	Leu	Pro	Phe	His	Val	Met	Lys	Thr	Leu	Asn
			260					265					270		
Leu	Arg	Ala	Arg	Leu	Asp	Phe	Gln	Thr	Pro	Gln	Met	Cys	Ala	Phe	Asn
		275					280					285			
Asp	Lys	Val	Tyr	Ala	Thr	Tyr	Gln	Val	Thr	Arg	Gly	Leu	Ala	Ser	Leu
	290					295					300				
Asn	Ser	Cys	Val	Asp	Pro	Ile	Leu	Tyr	Phe	Leu	Ala	Gly	Asp	Thr	Phe
305					310					315					320
Arg	Arg	Arg	Leu	Ser	Arg	Ala	Thr	Arg	Lys	Ser	Ser	Arg	Arg	Ser	Glu
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Pro	Asn	Val	Gln	Ser	Lys	Ser	Glu	Glu	Met	Thr	Leu	Asn	Ile	Leu	Thr
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<212> PRT
<213> MELEAGRIS GALLOPAVO
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<400> 4

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Leu	Thr	Lys 35	Thr	Gly	Phe	Gln	Phe 40	Tyr	Tyr	Leu	Pro	Thr 45	Val	Tyr	Ile
Leu	Val 50	Phe	Ile	Thr	Gly	Phe 55	Leu	Gly	Asn	Ser	Val 60	Ala	Ile	Trp	Met
Phe 65	Val	Phe	His	Met	Arg 70	Pro	Trp	Ser	Gly	Ile 75	Ser	Val	Tyr	Met	Phe 80
Asn	Leu	Ala	Leu	Ala 85	Asp	Phe	Leu	Tyr	Val 90	Leu	Thr	Leu	Pro	Ala 95	Leu
Ile	Phe	Tyr	Tyr 100	Phe	Asn	Lys	Thr	Asp 105	Trp	Ile	Phe	Gly	Asp 110	Val	Met
Cys	Lys	Leu 115	Gln	Arg	Phe	Ile	Phe 120	His	Val	Asn	Leu	Tyr 125	Gly	Ser	Ile
Leu	Phe 130	Leu	Thr	Cys	Ile	Ser 135	Val	His	Arg	Tyr	Thr 140	Gly	Val	Val	His
Pro 145	Leu	Lys	Ser	Leu	Gly 150	Arg	Leu	Lys	Lys 155	Asn	Ala	Val	Tyr	Val	160
Ser	Ser	Leu	Val	Trp 165	Ala	Leu	Val	Val	Ala 170	Val	Ile	Ala	Pro	Ile 175	Leu
Phe	Tyr	Ser	Gly 180	Thr	Gly	Val	Arg	Arg 185	Asn	Lys	Thr	Ile	Thr 190	Cys	Tyr
Asp	Thr	Thr 195	Ala	Asp	Glu	Tyr	Leu 200	Arg	Ser	Tyr	Phe	Val 205	Tyr	Ser	Met
Cys	Thr 210	Thr	Val	Phe	Met	Phe 215	Cys	Ile	Pro	Phe	Ile 220	Val	Ile	Leu	Gly
Cys 225	Tyr	Gly	Leu	Ile	Val 230	Lys	Ala	Leu	Ile	Tyr 235	Lys	Asp	Leu	Asp	Asn 240
Ser	Pro	Leu	Arg	Arg 245	Lys	Ser	Ile	Tyr	Leu 250	Val	Ile	Ile	Val	Leu 255	Thr
Val	Phe	Ala	Val 260	Ser	Tyr	Leu	Pro	Phe 265	His	Val	Met	Lys 270	Thr	Leu	Asn

Leu Arg Ala Arg Leu Asp Phe Gln Thr Pro Gln Met Cys Ala Phe Asn  
275 280 285

Asp Lys Val Tyr Ala Thr Tyr Gln Val Thr Arg Gly Leu Ala Ser Leu  
290 295 300

Asn Ser Cys Val Asp Pro Ile Leu Tyr Phe Leu Ala Gly Asp Thr Phe  
305 310 315 320

Arg Arg Arg Leu Ser Arg Ala Thr Arg Lys Ser Ser Arg Arg Ser Glu  
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Pro Asn Val Gln Ser Lys Ser Glu Glu Met Thr Leu Asn Ile Leu Thr  
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Glu Tyr Lys Gln Asn Gly Asp Thr Ser Leu  
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<211> 373

<212> PRT

<213> BOS TAURUS

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Thr Ala Ala Val Ala Ser Pro Phe Lys Cys Ala Leu Thr Lys Thr Gly  
35 40 45

Phe Gln Phe Tyr Tyr Leu Pro Ala Val Tyr Ile Leu Val Phe Ile Ile  
50 55 60

Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met Phe Val Phe His Met  
65 70 75 80

Lys Pro Trp Ser Gly Ile Ser Val Tyr Met Phe Asn Leu Ala Leu Ala  
85 90 95

Asp Phe Leu Tyr Val Leu Thr Leu Pro Ala Leu Ile Phe Tyr Tyr Phe  
100 105 110

Asn Lys Thr Asp Trp Ile Phe Gly Asp Ala Met Cys Lys Leu Gln Arg  
115 120 125

Phe Ile Phe His Val Asn Leu Tyr Gly Ser Ile Leu Phe Leu Thr Cys  
130 135 140

Ile Ser Ala His Arg Tyr Ser Gly Val Val Tyr Pro Leu Lys Ser Leu  
145 150 155 160

Gly Arg Leu Lys Lys Lys Asn Ala Val Tyr Ile Ser Val Leu Val Trp  
165 170 175



Leu Ile Val Val Val Gly Ile Ser Pro Ile Leu Phe Tyr Ser Gly Thr  
 180 185 190  
 Gly Ile Arg Lys Asn Lys Thr Ile Thr Cys Tyr Asp Thr Thr Ser Asp  
 195 200 205  
 Glu Tyr Leu Arg Ser Tyr Phe Ile Tyr Ser Met Cys Thr Thr Val Ala  
 210 215 220  
 Met Phe Cys Val Pro Leu Val Leu Ile Leu Gly Cys Tyr Gly Leu Ile  
 225 230 235 240  
 Val Arg Ala Leu Ile Tyr Lys Asp Leu Asp Asn Ser Pro Leu Arg Arg  
 245 250 255  
 Lys Ser Ile Tyr Leu Val Ile Ile Val Leu Thr Val Phe Ala Val Ser  
 260 265 270  
 Tyr Ile Pro Phe His Val Met Lys Thr Met Asn Leu Arg Ala Arg Leu  
 275 280 285  
 Asp Phe Gln Thr Pro Glu Met Cys Ala Phe Asn Asp Arg Val Tyr Ala  
 290 295 300  
 Thr Tyr Gln Val Thr Arg Gly Leu Ala Ser Leu Asn Ser Cys Val Asp  
 305 310 315 320  
 Pro Ile Leu Tyr Phe Leu Ala Gly Asp Thr Phe Arg Arg Arg Leu Ser  
 325 330 335  
 Arg Ala Thr Arg Lys Ala Ser Arg Arg Ser Glu Ala Asn Leu Gln Ser  
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 Gly Asp Thr Ser Leu  
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 <213> HOMO SAPIENS

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 Thr Ala Ala Val Ser Ser Ser Phe Lys Cys Ala Leu Thr Lys Thr Gly  
 35 40 45  
 Phe Gln Phe Tyr Tyr Leu Pro Ala Val Tyr Ile Leu Val Phe Ile Ile

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Lys	Pro	Trp	Ser	Gly 85	Ile	Ser	Val	Tyr	Met 90	Phe	Asn	Leu	Ala	Leu	Ala 95
Asp	Phe	Leu	Tyr 100	Val	Leu	Thr	Leu	Pro 105	Ala	Leu	Ile	Phe	Tyr 110	Tyr	Phe
Asn	Lys	Thr 115	Asp	Trp	Ile	Phe	Gly 120	Asp	Ala	Met	Cys	Lys 125	Leu	Gln	Arg
Phe	Ile	Phe	His	Val	Asn	Leu	Tyr 135	Gly	Ser	Ile	Leu 140	Phe	Leu	Thr	Cys
Ile 145	Ser	Ala	His	Arg	Tyr 150	Ser	Gly	Val	Val	Tyr 155	Pro	Leu	Lys	Ser	Leu 160
Gly	Arg	Leu	Lys 165	Lys	Asn	Ala	Ile	Cys 170	Ile	Ser	Val	Leu	Val	Trp	175
Leu	Ile	Val	Val 180	Val	Ala	Ile	Ser	Pro 185	Ile	Leu	Phe	Tyr	Ser	Gly	Thr 190
Gly	Val	Arg 195	Lys	Asn	Lys	Thr	Ile 200	Thr	Cys	Tyr	Asp	Thr 205	Thr	Ser	Asp
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Met 225	Phe	Cys	Val	Pro	Leu 230	Val	Leu	Ile	Leu	Gly 235	Cys	Tyr	Gly	Leu	Ile 240
Val	Arg	Ala	Leu 245	Ile	Tyr	Lys	Asp	Leu 250	Asp	Asn	Ser	Pro	Leu	Arg 255	Arg
Lys	Ser	Ile	Tyr 260	Leu	Val	Ile	Ile 265	Val	Leu	Thr	Val	Phe	Ala	Val	Ser 270
Tyr	Ile	Pro 275	Phe	His	Val	Met	Lys 280	Thr	Met	Asn	Leu	Arg 285	Ala	Arg	Leu
Asp	Phe	Gln 290	Thr	Pro	Ala	Met 295	Cys	Ala	Phe	Asn	Asp 300	Arg	Val	Tyr	Ala
Thr 305	Tyr	Gln	Val	Thr	Arg 310	Gly	Leu	Ala	Ser	Leu 315	Asn	Ser	Cys	Val	Asp 320
Pro	Ile	Leu	Tyr 325	Phe	Leu	Ala	Gly	Asp 330	Thr	Phe	Arg	Arg	Arg	Leu	Ser 335
Arg	Ala	Thr 340	Arg	Lys	Ala	Ser	Arg	Arg 345	Ser	Glu	Ala	Asn	Leu	Gln	Ser 350
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Thr Ala Ala Val Ser Ser Ser Phe Arg Cys Ala Leu Ile Lys Thr Gly		
35 40 45		
Phe Gln Phe Tyr Tyr Leu Pro Ala Val Tyr Ile Leu Val Phe Ile Ile		
50 55 60		
Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met Phe Val Phe His Met		
65 70 75 80		
Lys Pro Trp Ser Gly Ile Ser Val Tyr Met Phe Asn Leu Ala Leu Ala		
85 90 95		
Asp Phe Leu Tyr Val Leu Thr Leu Pro Ala Leu Ile Phe Tyr Tyr Phe		
100 105 110		
Asn Lys Thr Asp Trp Ile Phe Gly Asp Val Met Cys Lys Leu Gln Arg		
115 120 125		
Phe Ile Phe His Val Asn Leu Tyr Gly Ser Ile Leu Phe Leu Thr Cys		
130 135 140		
Ile Ser Ala His Arg Tyr Ser Gly Val Val Tyr Pro Leu Lys Ser Leu		
145 150 155 160		
Gly Arg Leu Lys Lys Lys Asn Ala Ile Tyr Val Ser Val Leu Val Trp		
165 170 175		
Leu Ile Val Val Val Ala Ile Ser Pro Ile Leu Phe Tyr Ser Gly Thr		
180 185 190		
Gly Ile Arg Lys Asn Lys Thr Val Thr Cys Tyr Asp Ser Thr Ser Asp		
195 200 205		
Glu Tyr Leu Arg Ser Tyr Phe Ile Tyr Ser Met Cys Thr Thr Val Ala		
210 215 220		
Met Phe Cys Ile Pro Leu Val Leu Ile Leu Gly Cys Tyr Gly Leu Ile		
225 230 235 240		

Val Arg Ala Leu Ile Tyr Lys Asp Leu Asp Asn Ser Pro Leu Arg Arg  
245 250 255

Lys Ser Ile Tyr Leu Val Ile Ile Val Leu Thr Val Phe Ala Val Ser  
260 265 270

Tyr Ile Pro Phe His Val Met Lys Thr Met Asn Leu Arg Ala Arg Leu  
275 280 285

Asp Phe Gln Thr Pro Glu Met Cys Asp Phe Asn Asp Arg Val Tyr Ala  
290 295 300

Thr Tyr Gln Val Thr Arg Gly Leu Ala Ser Leu Asn Ser Cys Val Asp  
305 310 315 320

Pro Ile Leu Tyr Phe Leu Ala Gly Asp Thr Phe Arg Arg Arg Leu Ser  
325 330 335

Arg Ala Thr Arg Lys Ala Ser Arg Arg Ser Glu Ala Asn Leu Gln Ser  
340 345 350

Lys Ser Glu Glu Met Thr Leu Asn Ile Leu Ser Glu Phe Lys Gln Asn  
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Gly Asp Thr Ser Leu  
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<210> 8  
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<212> PRT  
<213> HOMO SAPIENS

<400> 8

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Val Leu Gly Leu Glu Phe Ile Phe Gly Leu Leu Gly Asn Gly Leu Ala  
35 40 45

Leu Trp Ile Phe Cys Phe His Leu Lys Ser Trp Lys Ser Ser Arg Ile  
50 55 60

Phe Leu Phe Asn Leu Ala Val Ala Asp Phe Leu Leu Ile Ile Cys Leu  
65 70 75 80

Pro Phe Val Met Asp Tyr Tyr Val Arg Arg Ser Asp Trp Asn Phe Gly  
85 90 95

Asp Ile Pro Cys Arg Leu Val Leu Phe Met Phe Ala Met Asn Arg Gln  
100 105 110

Gly Ser Ile Ile Phe Leu Thr Val Val Ala Val Asp Arg Tyr Phe Arg  
115 120 125

Val Val His Pro His His Ala Leu Asn Lys Ile Ser Asn Trp Thr Ala  
 130 135 140  
 Ala Ile Ile Ser Cys Leu Leu Trp Gly Ile Thr Val Gly Leu Thr Val  
 145 150 155 160  
 His Leu Leu Lys Lys Lys Leu Leu Ile Gln Asn Gly Pro Ala Asn Val  
 165 170 175  
 Cys Ile Ser Phe Ser Ile Cys His Thr Phe Arg Trp His Glu Ala Met  
 180 185 190  
 Phe Leu Leu Glu Phe Leu Leu Pro Leu Gly Ile Ile Leu Phe Cys Ser  
 195 200 205  
 Ala Arg Ile Ile Trp Ser Leu Arg Gln Arg Gln Met Asp Arg His Ala  
 210 215 220  
 Lys Ile Lys Arg Ala Ile Thr Phe Ile Met Val Val Ala Ile Val Phe  
 225 230 235 240  
 Val Ile Cys Phe Leu Pro Ser Val Val Val Arg Ile Arg Ile Phe Trp  
 245 250 255  
 Leu Leu His Thr Ser Gly Thr Gln Asn Cys Glu Val Tyr Arg Ser Val  
 260 265 270  
 Asp Leu Ala Phe Phe Ile Thr Leu Ser Phe Thr Tyr Met Asn Ser Met  
 275 280 285  
 Leu Asp Pro Val Val Tyr Tyr Phe Ser Ser Pro Ser Phe Pro Asn Phe  
 290 295 300  
 Phe Ser Thr Leu Ile Asn Arg Cys Leu Gln Arg Lys Met Thr Gly Glu  
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 Lys Thr Arg Gly Ala Pro Glu Ala Leu Met Ala Asn Ser Gly Glu Pro  
 340 345 350  
 Trp Ser Pro Ser Tyr Leu Gly Pro Thr Ser Asn Asn His Ser Lys Lys  
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Ala  Val  Ala  Leu  Trp  Thr  Phe  Leu  Phe  Arg  Val  Arg  Val  Trp  Lys  Pro
          35          40          45

Tyr  Ala  Val  Tyr  Leu  Leu  Asn  Leu  Ala  Leu  Ala  Asp  Leu  Leu  Leu  Ala
          50          55          60

Ala  Cys  Leu  Pro  Phe  Leu  Ala  Ala  Phe  Tyr  Leu  Ser  Leu  Gln  Ala  Trp
65          70          75          80

His  Leu  Gly  Arg  Val  Gly  Cys  Trp  Ala  Leu  Arg  Phe  Leu  Leu  Asp  Leu
          85          90          95

Ser  Arg  Ser  Val  Gly  Met  Ala  Phe  Leu  Ala  Ala  Val  Ala  Leu  Asp  Arg
          100          105          110

Tyr  Leu  Arg  Val  Val  His  Pro  Arg  Leu  Lys  Val  Asn  Leu  Leu  Ser  Pro
          115          120          125

Gln  Ala  Ala  Leu  Gly  Val  Ser  Gly  Leu  Val  Trp  Leu  Leu  Met  Val  Ala
          130          135          140

Leu  Thr  Cys  Pro  Gly  Leu  Leu  Ile  Ser  Glu  Ala  Ala  Gln  Asn  Ser  Thr
145          150          155          160

Arg  Cys  His  Ser  Phe  Tyr  Ser  Arg  Ala  Asp  Gly  Ser  Phe  Ser  Ile  Ile
          165          170          175

Trp  Gln  Glu  Ala  Leu  Ser  Cys  Leu  Gln  Phe  Val  Leu  Pro  Phe  Gly  Leu
          180          185          190

Ile  Val  Phe  Cys  Asn  Ala  Gly  Ile  Ile  Arg  Ala  Leu  Gln  Lys  Arg  Leu
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Arg  Glu  Pro  Glu  Lys  Gln  Pro  Lys  Leu  Gln  Arg  Ala  Gln  Ala  Leu  Val
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Thr  Leu  Val  Val  Val  Leu  Phe  Ala  Leu  Cys  Phe  Leu  Pro  Cys  Phe  Leu
225          230          235          240

Ala  Arg  Val  Leu  Met  His  Ile  Phe  Gln  Asn  Leu  Gly  Ser  Cys  Arg  Ala
          245          250          255

Leu  Cys  Ala  Val  Ala  His  Thr  Ser  Asp  Val  Thr  Gly  Ser  Leu  Thr  Tyr
          260          265          270

Leu  His  Ser  Val  Val  Asn  Pro  Val  Val  Tyr  Cys  Phe  Ser  Ser  Pro  Thr
          275          280          285

Phe  Arg  Ser  Ser  Tyr  Arg  Arg  Val  Phe  His  Thr  Leu  Arg  Gly  Lys  Gly

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Leu Pro Phe

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Val Tyr Leu Leu Leu
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20             25

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*(Musical notation continues)*

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